



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

TO PLOT $ax^2 + bx + c = 0$.

By J. L. PATTERSON.

$x = -b/2a \pm \sqrt{(b^2 - 4ac)}/2a$, which may be written $x = -(b/2a) \pm k$, from which it is evident that $x = -b/2a$ is the equation of the axis of the curve, and if $-(b/2a)$ be substituted for x in the equation $ax^2 + bx + c = y$, the value of y thus found will give the intersection of the curve with the axis of the curve, that is the lowest (or if ax^2 be negative, the highest) point of the curve. *Thus the two most important characteristics of the curve, viz., the axis and the highest or lowest point are determined at the outset in a very simple manner.*

For example take the equation $x^2 - 3x - 18 = 0$. Use the equation of the axis $x = -(b/2a) = \frac{3}{2} = 1\frac{1}{2}$, which gives the axis of the curve, and if $\frac{3}{2}$ be substituted for x in the equation $x^2 - 3x - 18 = y$, we find $y = -20\frac{1}{4}$ which gives C the intersection of the curve with the axis of the curve, or the lowest point on the curve, and thus the two most important characteristics of the curve are known.

If $x = 0$, $y = -18$, as usual, which gives the point D and the symmetric point D' is at once known. The solution of the equation gives $x = 6$ or -3 which gives the points E' and E as usual, and we have five points which would be sufficient for a rough plot. But we know the axis and the lowest point which are of vital importance.

If the curve does not cut the axis of x this method gives only three points but other points may be found in the usual manner, if necessary, which would seldom be the case.

CHESTNUT HILL ACADEMY,
CHESTNUT HILL, PA.